

CLAIMS

1. A method for suppressing tumor proliferation, comprising the step of inhibiting the expression of a PDGF-A or the binding between a PDGF-A homodimer and a PDGFR α .

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2. The method of claim 1, wherein the step administers to a tumor a minus strand RNA virus vector encoding a secretory protein that binds to a PDGF-A homodimer or a PDGFR α .

10 3. The method of claim 2, wherein a cell to which the vector has been introduced is administered.

4. The method of claim 3, wherein the cell is a dendritic cell.

15 5. The method of claim 2, wherein the secretory protein is a soluble PDGFR α .

6. The method of claim 2, wherein the minus strand RNA virus vector is a Sendai virus vector.

20 7. The method of claim 1, wherein the step administers to a tumor an antisense RNA or siRNA of a PDGF-A gene, or a vector encoding the antisense RNA or siRNA.

8. The method of claim 1, wherein the tumor is selected from the group consisting of a squamous cell carcinoma, a hepatocarcinoma, and an adenocarcinoma.

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9. An antitumor agent comprising a compound that inhibits the expression of a PDGF-A or the binding between a PDGF-A homodimer and a PDGFR α as an active ingredient.

30 10. The antitumor agent of claim 9, wherein the agent comprises any one of (a) to (d) below:

(a) a secretory protein that binds to a PDGF-A homodimer or a PDGFR α ,

(b) an antisense RNA of a PDGF-A gene or a PDGFR α gene,

(c) an siRNA of a PDGF-A gene or a PDGFR α gene, and

(d) a vector encoding any one of (a) to (c).

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11. The antitumor agent of claim 10, wherein the agent comprises a minus strand RNA

virus vector encoding a secretory protein that binds to a PDGF-A homodimer or a PDGFR α .

12. The antitumor agent of claim 10 or 11, wherein the secretory protein is a soluble PDGFR α .

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13. The antitumor agent of claim 11, wherein the minus strand RNA virus vector is a Sendai virus vector.

10 14. The antitumor agent of claim 10, wherein the agent comprises a cell, to which has been introduced a vector that encodes a secretory protein that binds to a PDGF-A homodimer or a PDGFR α .

15. The antitumor agent of claim 14, wherein the cell is a dendritic cell.

15 16. The antitumor agent of claim 10, wherein the agent comprises an antisense RNA or siRNA of a PDGF-A gene, or a vector encoding the antisense RNA or siRNA, as an active ingredient.

20 17. The antitumor agent of claim 9, wherein the tumor is selected from the group consisting of a squamous cell carcinoma, a hepatocarcinoma, and an adenocarcinoma.